

Amendments to the Specification:

Please amend the paragraphs starting at page 13, line 10 and ending at page 14, line 12 to read, as follows.

In terms of the amount by which the electrical charge is gained by a toner particle due to the adhesion of polymer lubricant particles to the toner particle, a polymer lubricant the particles of which are not uniform in shape, is smaller than a polymer lubricant which is uniform in particle shape. Further, in terms of the strength of adhesion between a toner particle and a lubricant particle, the former is greater than the latter, being therefore more likely to remain adhered to the toner particle while the toner is consumed for development. Therefore, if the development sleeve of development blade is coated with the polymer lubricant which is nonuniform in particle shape, the lubricant on the development sleeve or development blade quickly disappears, along with the beneficial effect of the lubricant, that is, the prevention of the formation of an image with a substandard density, an image suffering the negative ghost, and the like images. In other words, if the polymer lubricant is not uniform in particle shape, it does not last long, nor provide its benefits. ~~the benefits it provides.~~

Thus, a polymer lubricant particle is desired to be spherical, more specifically, no less than 0.90 in circularity index. Polymer lubricant, the particles of which are greater in circularity index than 0.90 is greater in the length of time it can remain on the development sleeve and development blade to function as micro-carrier to give a toner particle an additional amount of electrical charge, while functioning as a lubricant.

Please amend the paragraph starting at page 18, line 14 and ending at page 18, line 17 to read, as follows.

The image forming apparatus in the drawing comprises the main assembly as a printer engine (which hereinafter will be referred to as an apparatus main assembly).  
assembly).

Please amend the paragraphs starting at page 21, line 27 and ending at page 22, line 16 to read, as follows.

Next, referring to Figure 3, the developing apparatus 4 in this embodiment will be described in detail. Figure 3 [[4]] is a vertical sectional view of the developing apparatus 4, showing the general structure thereof.

The developing apparatus 4 shown in this drawing is such a developing apparatus that uses magnetic single-component toner as developer. It essentially comprises: a toner container for storing the toner 11; a stirring member 16 for conveying the toner 11 in the toner container 4 [[1]] while loosening it; a development sleeve 10 as a developer carrying member for bearing and conveying the toner 11 having arrived at the development roller 10; and a development blade 9 as a developer regulating member for regulating the thickness of the toner layer on the development sleeve 10.

Please amend the paragraph starting at page 26, line 2 and ending at page 26, line 18 to read, as follows.

When coating the development sleeve 10 with the use of the sponge roller 18, the development sleeve 10 is to be positioned in the lubricant coating apparatus, in parallel

with [[to]] the sponge roller 18. When placing the development sleeve 10 into the lubricant coating apparatus, it should be pushed in the direction indicated by an arrow mark B so that the peripheral surface of the development sleeve 10 will compress the sponge roller 18 by roughly 1 mm. Also when placing the development sleeve 10 into the lubricant coating apparatus, the development sleeve 10 is desired to be pressed by the lengthwise ends, with the use of a pair of rotational bearings (unshown) so that the amount by which the development sleeve 10 compresses the sponge roller 18 becomes uniform in terms of the lengthwise direction of the development sleeve 10.

Please amend the paragraphs starting at page 35, line 9 and ending at page 35, line 27 to read, as follows.

Further, when the toner was placed between the development sleeve and development blade without placing the polymer particulates between the development sleeve and development blade, the toner was not effective as a lubricant, and the problem that the density level which the developing apparatus can achieve during the early stage of its first time usage is substandard, could not be solved.

As described above, the problem that an image substandard in density, an image suffering from the negative ghost, or the like images, are likely to be produced during the early stage of the first time usage of a developing apparatus could be eliminated by using, as the lubricant, spherical polymer particulates which were opposite in polarity to the toner, and the particle size of which was substantially smaller than the weight average particle diameter of the toner, more specifically, no more than one third the weight average particle diameter of the toner.

Please amend the paragraph starting at page 44, line 6 and ending at page 44, line 13 to read, as follows.

Table 3 given below shows the results of the same experiment as the above described experiments, except that the development sleeve or development blade coated with melamine particulates, as a lubricant, with a weight average particle diameter of 0.1  $\mu\text{m}$  was employed. The method for applying the lubricant was the same as the one in the second embodiment, and the applied amount of the lubricant was 3.0 g/m<sup>2</sup>.

Please amend the paragraph starting at page 45, line 6 and ending at page 45, line 13 to read, as follows.

As will be evident from Table 3, when the lubricant was used, virtually no negative ghost was formed, not only with the toners lower in circularity index ( $Y < 70.4 \%$ ), but also with the toners higher in circularity index ( $Y \geq 70.4 \%$ ), from the very beginning of the first time usage of the developing apparatus until [[till] the end of its service life; the developing apparatus always formed excellent images.

Please amend the paragraphs starting at page 46, line 5 and ending at page 46, line 12 to read, as follows.

As described above, when toner high in circularity index is used by a developing apparatus comprising a development sleeve or development blade coated with polymer particulates as the lubricant, the role of the lubricant as micro-carrier is enhanced. Therefore, a high quality image can be obtained, and the negative ghost, which has long been a problem, is not formed.

The selections regarding the polymer particulates and development sleeve are to be made so that the particle diameter of the polymer particulates will be smaller than the arithmetic average roughness Ra ( $\mu\text{m}$ ) of the peripheral surface of the development sleeve. Next, this relationship between the particle diameter of the polymer particulate as the lubricant and the arithmetic average roughness Ra of the development sleeve will be described.

Please amend the paragraph starting at page 52, line 18 and ending at page 53, line 2 to read, as follows.

As will be evident from Table 4, when the melamine resin particulates were used as lubricant, the formation of the negative ghost was drastically rarer than when no lubricant was used; the usage of melamine resin particulates as the lubricant was effective to prevent the formation of the negative ghost. Further, in terms of the prevention of the formation of the negative ghost during the early stage of the first time usage of a developing apparatus, the melamine particulates with a particle diameter of  $0.1\ \mu\text{m}$  were superior to the melamine particulates with a particle diameter of  $2\ \mu\text{m}$ .

Please amend the paragraph starting at page 54, line 1 and ending at page 54, line 15 to read, as follows.

As will be evident from the above description, selecting, as the lubricant, polymer particulates which are opposite in polarity to the toner to be used, and the weight average particle diameter of which is smaller than the arithmetic roughness Ra of the peripheral surface of the development sleeve, makes it possible to make the lubricant function not

only to lubricate, but also, to provide the toner particles with a supplementary amount of electrical charge for stabilizing them in terms of the amount of electrical charge they carry, and to stabilize the amount by which the toner is coated on the peripheral surface of the development sleeve. In other words, such a selection stabilizes the performance of a developing apparatus.

Please amend the paragraph starting at page 54, line 26 and ending at page 55, line 12 to read, as follows.

As described above, the formation of the negative ghost which is more likely to occur during the early stage of the first time usage of a developing apparatus can be prevented by using, as the lubricant, polymer particulates which are opposite in polarity to the toner used by the developing apparatus, and the relationship between the toner particle diameter of which and the arithmetic roughness Ra of the peripheral surface of the development sleeve is as described above. Moreover, the usage of the lubricant applying method in the second embodiment, and the toner, in the third embodiment, higher in circularity index, enhance the benefits of the present invention.